

DIRECT DIGITAL SIGNAL PROCESSOR CONTROL OF MULTI-
CHANNEL SCAN FOR RE-ESTABLISHING CONNECTIONS IN A
WIRELESSLY NETWORKED DEVICE

5 ABSTRACT OF THE INVENTION

A method and system for establishing a wireless connection between a portable computer system and a wireless network, particularly when the portable computer system goes out of coverage and a wireless connection needs to be re-established. The portable computer system has a main processor and a digital signal processor (DSP). The main processor is placed in a low power mode, conserving battery power. When the portable computer system goes out of coverage, broadcast channels used by the wireless network are scanned by the DSP instead of the main processor to identify channels that have sufficient signal strength for the wireless connection. Thus, the main processor remains in the low power mode. When the DSP identifies acceptable channels, it wakes up the main processor and identifies the channels having sufficient signal strength. The main processor then establishes a wireless connection using one of the channels identified by the DSP.